

The Rufford Foundation
Final Report

Congratulations on the completion of your project that was supported by The Rufford Foundation.

We ask all grant recipients to complete a Final Report Form that helps us to gauge the success of our grant giving. The Final Report must be sent in **word format** and not PDF format or any other format. We understand that projects often do not follow the predicted course but knowledge of your experiences is valuable to us and others who may be undertaking similar work. Please be as honest as you can in answering the questions – remember that negative experiences are just as valuable as positive ones if they help others to learn from them.

Please complete the form in English and be as clear and concise as you can. Please note that the information may be edited for clarity. We will ask for further information if required. If you have any other materials produced by the project, particularly a few relevant photographs, please send these to us separately.

Please submit your final report to jane@rufford.org.

Thank you for your help.

Josh Cole, Grants Director

Grant Recipient Details	
Your name	Kojo Kwakye Ofori-Amanfo
Project title	KNUST Wewe River Amphibian Project (K-WRAP)
RSG reference	14967-1
Reporting period	1 year 6 months
Amount of grant	£6,000
Your email address	kojoofori17@yahoo.co.uk
Date of this report	7 th October, 2015

1. Please indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

Objective	Not achieved	Partially achieved	Fully achieved	Comments
Restore degraded habitats and establish vegetation corridors			x	We involved student environmental groups to replant 500 seedlings of indigenous tree species (<i>Terminalia superba</i> , <i>Khaya anthotheca</i> , <i>Entandophragma angolense</i> , and <i>Ceiba pentandra</i>) covering 3 ha of the KNUST riparian wetland to restore habitats and connect amphibian populations. Our activities have improved habitat conditions and offer protection for amphibians and co-occurring wildlife.
Establish long term monitoring study areas for both species and habitats			x	We surveyed and screened the three major habitat zones on the Kwame Nkrumah University of Science and Technology (KNUST) campus including the riparian zone, KNUST Botanical Garden and the FRNR demonstration farm for amphibians over two seasons (wet and dry) covering a 6 month period. Within these zones we selected and mapped out critical and suitable habitats for permanent monitoring whiles quantifying relevant habitat parameters.
Increase awareness on amphibian protection			x	Our amphibian conservation message focused on the general university community and surrounding localities. We organised radio programmes, public announcements and pasted posters on faculty and departmental billboards. In addition, we freely distributed t-shirts, books and flyers. Most of these activities were blogged on our social media pages. Our activities have resulted in significant behavioural change among local people. For example, the rate of extraction of tree resources and the dumping of water and liquid waste have reduced over the project period and this is likely to continue. K-WRAP was also featured on the 6th Annual Save The Frogs Day, the largest day of amphibian education and conservation action. During this event, we rallied support of students and the general university community to eliminate threats facing the Wewe River and its amphibians (http://www.savethefrogs.com/day/2014/index.htm #ghana).

Build capacity of students in surveying and monitoring amphibians			x	The project successfully trained 20 undergraduate students on amphibian monitoring protocols, identification and how to design scientific research. This was achieved through our field training courses and workshops. Student beneficiaries can now handle and identify some common amphibian species in the field. Some of these trainees are going on to initiate their own amphibian conservation programmes.
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2. Please explain any unforeseen difficulties that arose during the project and how these were tackled (if relevant).

We had to hold on to some aspects of the project as there were delays in seedling procurement and difficulty in mobilising student volunteers. K-WRAP aimed to work with many student environmental groups and faculties in the protection of the Wewe Riparian environment and the occurring amphibian populations. Unfortunately, most of these bodies had their own timelines which did not overlap with others thus, made it difficult to effectively mobilise students. We therefore, had to shift most of our activities to the end of the semester after the semester examinations when most student activities were over to get the needed attention.

Another difficulty was the delay in securing the required seedlings for the proposed enrichment planting exercises. We proposed using these seedlings; Limba (*Terminalia superba*), African mahogany (*Khaya anthotheca*), Kapok (*Ceiba pentandra*) and Gedu Nohor (*Entandophragma angolense*) for planting. We first had to place an order in advance with the closest and most reliable government institution tasked with raising tree seedlings, Forestry Research Institute of Ghana. Unfortunately, there were delays in carrying out this task as we first had to conduct preliminary field surveys to select which portion of the wetland needed replanting before seeking approval from school authorities. This period took some months to achieve by which time the raining season was almost over. Thus, we had to re-plan and move the seedling raising period to the next rainy season, causing the project to delay.

3. Briefly describe the three most important outcomes of your project.

- i. With the aim of enhancing the expertise of students in amphibian conservation protocols to sustain the project's initiative in the long-term, we organised hands-on field courses and workshops for students on the KNUST campus. Through collaborations with some heads of departments and student leaders, for the first time, over 20 students were trained in the proper methods of monitoring and surveying amphibians. They are now aware of the amphibian extinction crisis, the need to conserve them and how to do so. They have also been taken through amphibian survey techniques; site selection; proper ways of handling and identifying local amphibians; how to enter field data. Through this project, we have increased female participation in amphibian conservation on the KNUST campus.
- ii. The project has secured 3 ha of wetland along the KNUST portion of the Wewe River in which 500 trees have been planted to protect amphibians and connect them to neighbouring habitats. In addition, we've been able to lobby for the prevention of further destructive activities within the campus portion of the Wewe River. Within this acclaimed portion of the River and neighbouring intact habitats, we have selected and mapped out

sites as permanent amphibian monitoring stations. This means that the creation of this riparian buffer and monitoring stations will not only protect amphibians but also serve to contribute important data on the amphibian populations and the ecosystem health of the wetland.

- iii. K-WRAP has increased publicity through various platforms including Facebook, radio programmes, distribution of educational materials, blogs (<http://www.savethefrogs.com/frogblog/events-frogs/ghana-restoring-degraded-habitats-for-amphibians/>; <https://www.facebook.com/savethefrogs.ghana.9>), events (<http://www.savethefrogs.com/day/2014/index.html#ghana>). We successfully rallied local peoples support for the protection of the wetland and its resources within the KNUST campus and in four immediate surrounding communities (Ayeduase, Kotei, Ahensan and Ayigya).

4. Briefly describe the involvement of local communities and how they have benefitted from the project (if relevant).

We involved local people (within the university and its surroundings) in the planning, sensitisation and monitoring stages of this project. At the start of the project, team members and student volunteers educated the university and the Kumasi Metropolis about the project's objectives and activities on the university's local radio station (Focus FM). Also Team K-WRAP embarked on a door to door education programme in which we interacted with students and members of surrounding communities. The project has also enlisted the services of four local volunteers to report any degrading activities to school and local authorities. They will also help to monitor the planted seedlings.

5. Are there any plans to continue this work?

The KNUST Wewe River Amphibian Project is an initiative to improve habitat conditions for frogs and local stakeholders' knowledge and appreciation of amphibians through a long-term monitoring and environmental awareness programme. We will therefore, continue this work in the direction of building local capacity on sustainable practices along the river confines whiles building their capacity in amphibian conservation. Also we will continue with population assessments to update our amphibian database to help develop effective conservation guidelines and measures.

6. How do you plan to share the results of your work with others?

K-WRAP has a strong collaboration with SAVE THE FROGS! Which boast of +35,000 followers. We used their platform to send out electronic newsletters of RSG's support and about our project activities to SAVE THE FROGS! Mailing list subscribers. The project's activities and preliminary findings were also featured on the 6th Annual Save the Frogs Day (<http://www.savethefrogs.com/day/2014/index.html#ghana>). We have also shared some of our project activities on social media networks including Facebook (<https://www.facebook.com/savethefrogs.ghana.9>) and blog postings (<http://www.savethefrogs.com/frogblog/events-frogs/ghana-restoring-degraded-habitats-for-amphibians/>).

KWRAP will continue to share findings about protecting the Wewe River and its amphibians at our website www.savethefrogs.com/ghana.

7. Timescale: Over what period was The Rufford Foundation grant used? How does this compare to the anticipated or actual length of the project?

Although the project timeline initially was to last for 12 months, we couldn't achieve all our objectives within this period. We needed more time to adjust to the planting season (rainy season) as a result of difficulties encountered in mobilising students and delays in seedlings procurement for planting. Thus, it took a total of 18 months to complete.

8. Budget: Please provide a breakdown of budgeted versus actual expenditure and the reasons for any differences. All figures should be in £ sterling, indicating the local exchange rate used.

Item	Budgeted Amount	Actual Amount	Difference	Comments
Reconnaissance: Daily Subsistence Allowance (DSA) for Preparatory training of 5-team members	75	75	0	No changes were made.
Habitat Restoration: Vehicle Rent including fuel for seedling collection and transportation to restoration site	50	100	50	There was an upward increase in fuel which affected the budgeted amount accordingly.
Habitat Restoration: Seedling purchase	500	1000	500	RSG suggested we increased the number of tree species to be used for replanting which we did, moving the number from two to four. However, there was no increase in the number of seedlings used for replanting as the prices of seedlings had increased from the budgeted £0.5 to £1 by the following year.
Field component: DSA for 5-team members for 30 days (20 days amphibian monitoring surveys + 10 days habitat restoration)	750	750	0	No changes were made.
Workshop: Printing of 100 workshop materials	50	60	10	Slight increase in printing cost.
Workshop: Lunch and refreshment (cookies, water and drinks) for 30 participants for 4 workshops	600	200	-400	We reduced the amount spent on refreshment to help pay for other services which had increased in price.
Workshop: DSA for 5-team	100	100	0	No changes were made.

members 4 workshops				
Conservation Education: Organising Save The Frogs Day programme (venues, chairs, power generators, projectors and canopies)	300	400	100	There were increases in some of the items we needed for the event. For example, the cost of hire for generator and fuel increase almost by 100% as there were sharp rise in local fuel prices.
Save The Frogs Day: Drinking water for an estimated 500 participants	50	50	0	No changes were made.
Save The Frogs Day: Printing of 2 banners	40	80	40	The cost for each banner as at the time of printing was £20. Thus, we had to pay an extra £20 for the other banner.
Save The Frogs Day: Printing of 200 posters @ £0.5/poster	100	150	50	Increase in printing costs.
Save The Frogs Day: awards, cash and souvenirs to four deserving competing schools @ £50/1 st prize; £35/ 2nd prize and £25/3rd prize.	440	440	0	No changes were made.
Education: Printing 200 t- shirts; 200 stickers; 200 CDs of frogs' calls; 500 info cards; 500 wrist bands.	2250	2400	100	There were increases in production costs.
Conservation Education: DSA for 5-team members @ £5/day for 4 days of outreach (Radio programmes, school outreaches, Save The Frogs Day Celebrations	75	75	0	No changes were made.
Conservation Education: Creating and erecting 5 small size amphibian conservation sign boards @ £70/sign	350	0	-350	We had to take this portion out to use the money for other services which had increased in cost.
Conservation Education: 30 mins of air Time each week for 8 weeks.	100	160	60	We increased the number appearances we made to the radio station by 3 more weeks due to popular demand by the student body hence, the additional £60
Hiring of professional photographer to cover	150	0	-100	We had to take this portion out to use the money for other services

events and make a documentary @ £50/event for 3 events (1 survey+ 1 restoration + 1 Save The Frogs Day)				which had increased in cost.
Total	5,980	6,040	60	Notes to Budget <i>As of the date we worked on the project budget, conversion rates were as follows: GHS/GBP = 3.42548 (GHS, Ghanaian Cedi; GBP, Great Britain Pound)</i>

9. Looking ahead, what do you feel are the important next steps?

To ensure the sustainable management of resources of the wetland, the following key activities need to be planned and executed;

- Build local capacity on sustainable agricultural practices.
- Continue work on the establishment and updating of amphibian database.
- Build local capacity in amphibian conservation.
- Develop amphibian conservation guidelines and incorporate into the university's infrastructural development policy.

10. Did you use The Rufford Foundation logo in any materials produced in relation to this project? Did the RSGF receive any publicity during the course of your work?

The RSG logo was featured in all our project designs: t-shirts, flyers and exercise books and presentations. In addition we recognised Rufford's support; at SAVE THE FROGS! Ghana and SAVE THE FROGS! KNUST websites, our blogs and Facebook postings.

11. Any other comments?

We would like to thank the Rufford Small Grants Foundation for sponsoring this project. We also acknowledge SAVE THE FROGS! Ghana and USA for the technical support and featuring the project on their webpages. We are also grateful to all student volunteers especially SAVE THE FROGS! KNUST members and all leaders and members of the communities we visited. We are also grateful to departmental heads and lecturers of wildlife, chemistry and biological sciences of KNUST.